Dr. Albert B. Sabin  
The Children’s Hospital  
Research Foundation  
Elland Avenue and Bethesda  
Cincinnati 29, Ohio  

Dear Dr. Sabin:

I want to thank you for the very informative copy of your letter to Dr. Andrews. Some of the information contained in the letter will be of considerable help to us in our vaccine studies.

I should like to give you a little more information on our fatal case of B virus and to correct an error in my report to you on the telephone. The correction concerns the titer of the virus in the cord suspension. The figure which I quoted you, 10⁻⁶.⁵, was on passage material and not on the original suspension. The original cord suspension was not titrated, but the brain suspension was with a value of 10⁻² obtained. We know, however, that the cord suspension contained more virus than did the brain and we are attempting a titration now. In our isolation studies, ten roller tubes of monkey kidney cells each were inoculated with 0.1 ml of a ten percent suspension cord and another group of ten were inoculated with similar quantities of brain suspension. Ten cultures of a human amnion cell strain were also inoculated with the same suspensions. We also had a sample of the spinal fluid containing blood of which 0.1 ml of a 10⁻¹ dilution was inoculated into ten tubes of each culture type. In the monkey kidney tubes inoculated with brain suspension, ten of ten showed virus damage typical of B virus after four days incubation. Eight of ten monkey kidney tubes inoculated with the cord suspension showed typical B virus cytopathology on the first day. Two were contaminated. The monkey kidney tubes inoculated with the spinal fluid and blood mixture revealed two positive tubes on the third day. The others remained negative. None of the human amnion cultures inoculated with brain suspension showed evidence of virus. Of the human amnion cultures inoculated with cord suspension, all ten showed typical B virus cytopathology on the third day. The spinal fluid and blood mixture proved toxic to human amnion cells. The virus isolated from the cord in monkey kidney tubes was assayed against B virus antiserum and against herpes antiserum. Against herpes antiserum, it titered less than 1:2 and
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against B virus, it titered 1:64 which is the normal endpoint of this serum against our B virus.

I failed to report to you during our telephone conversation about the animal work which is in progress. The brain and cord tissues were pooled and made up to a ten percent suspension in saline. 0.03 ml of this suspension were inoculated intracerebrally into twelve, eleven-thirteen gram Swiss mice. The spinal fluid and blood mixture was inoculated intracerebrally into six mice. After nine days, all eighteen mice are healthy and show no evidence of encephalitis. This test will be continued on while at the same time we are repeating it per your request and will include at the same time mice inoculated with known herpes virus. We are also starting the work on rabbit pathogenicity which you requested.

I heard on the radio this morning about your work on the Russian claim of the perfection of a vaccine against multiple sclerosis. At your convenience and when you are free to do so, I would be most interested to hear something of this project.

With kindest regards.

Sincerely yours,

Robert N. Hull, Ph.D.
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In Chg., Tissue Culture Res.
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